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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,574	09/10/2003	Philip D. Nguyen	2003-IP-010789U1	4692

7590 07/27/2005

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EXAMINER

SUCHFIELD, GEORGE A

ART UNIT	PAPER NUMBER
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3676

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/659,574	Applicant(s) NGUYEN ET AL.	
	Examiner George Suchfield	Art Unit 3676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/31/05; 7/7/05; 7/11/05</u> | 6) <input type="checkbox"/> Other: _____ |

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1. The disclosure is objected to because of the following informalities:

Throughout the specification, e.g., note Para [0008], the term “tackyfied” is deemed misspelled. The term, instead, should appear as -- tackified --.

Appropriate correction is required.

2. Claims 1 and 5 are objected to because of the following informalities:

The term “tackyfied” recited in these claims is deemed misspelled. The term, instead, should appear as -- tackified --.

Appropriate correction is required.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2, 3, 6, 7 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2, 3, 6 and 7 are deemed indefinite in being drawn to improper Markush groupings. As noted in MPEP Section 2173.05(h), the use of the term “comprising” or “comprises” is improper in setting forth the Markush grouping. Accordingly, in line of each of these claims, the transitional phrase “comprises” must be changed to, -- is selected from the group consisting of -- or -- is --.

Claims 7 and 8 recite the limitation “the tackifying composition” in line 1 of each claim. There is insufficient antecedent basis for this limitation in the claim.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Weaver et al (6,047,772).

Weaver et al (note col. 3, lines 23-40; col. 4, lines 1-6; col. 6, line 32 – col. 7, line 2) discloses a process of fracturing a subterranean formation and emplacing proppants into the resulting fracture(s) wherein the proppant may comprise an initial resin-coated particle or proppant, such as resin-coated sand, which is subsequently coated with a tackifying composition. In one embodiment, the tackifying compound may be admixed with “a material that has multi-functional reactive sites” such that the tackifying agent will harden or cure upon emplacement of the coated proppants within the formation fracture(s), as called for in claims 1 and 5.

As per claims 2 and 6, the resin-coated sand utilized in Weaver et al would have to be either be pre-cured or curable. In any event, judicial notice is taken that the use of a proppant comprising either a pre-cured or curable resin is conventional and well known in the well fracturing art to which the invention pertains.

As per claims 3 and 7, the tackifying agent(s) utilized in the fracturing/propping process of Weaver et al may comprise one or more of the recited components or compounds.

As per claims 4 and 8, Weaver et al (col. 7, line 22 – col. 8, lines 13) makes reference to several alternative embodiments for formulating and injecting the proppant composition. More specifically, it is disclosed that the tackifying compound can be introduced into the carrier fluid before or after the addition of resin-coated particulate(s), use is made of a blender or “any flowline”, and “the compounds may be introduced with metering pumps of the like”.

Accordingly, the use of admixing and injection techniques or steps is deemed to inherently encompass applicant’s recitation of coating the resin-coated particulate with the tackifying agent “on-the fly”.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

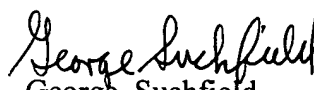
Other references disclose processes of fracturing and emplacing proppants in subterranean formations employing a tackifying composition(s).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Suchfield whose telephone number is 571-272-7036. The examiner can normally be reached on M-F (6:30 - 3:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Brian Glessner can be reached on 571-272-6843. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


George Suchfield
Primary Examiner
Art Unit 3676

Gs
July 20, 2005